

Group work problems: *Work these problems on your own paper.*

Problem set 1

Find each sum. Make sure that you write complete equations to express your sum. e.g., for problem (a), write $2 + (-7) = -5$.

a. Find $2 + (-7)$

b. Find $-2 + (-7)$

c. Find $-2 + 7$

d. Find $-\frac{7}{3} + 12$

e. Find $-\frac{8}{9} + \left(-\frac{5}{12}\right)$

f. Find $\frac{7}{27} + \left(-\frac{11}{6}\right)$

g. Find $7 + (-8) + (-12) + 2 + 6 + (-1)$

h. Find $|2 + (-3)| + |-2 + 3|$

Problem set 2

Find each difference *after first rewriting the difference as a sum*. Make sure that you "line up your equal signs" as illustrated in class.

a. Find $2 - (-7)$

b. Find $-2 - (-7)$

c. Find $-2 - 7$

d. Find $7 - 12$

e. Find $-7 - (-12)$

f. Find $12 - (-7)$

Problem set 3

Evaluate each expression. Make sure that you "line up your equal signs" as illustrated in class.

a. Evaluate $2a + b$ when $a = 11$ and $b = -22$.

b. Evaluate $w - (x - y)$ when $w = -10$, $x = -2$, and $y = -4$.

c. Evaluate $w - (x - y)$ when $w = 10$, $x = 2$, and $y = 4$.

d. Evaluate $x^2 - 3(2y^2 - 8)$ when $x = 0$ and $y = 1$.

Problem set 4

Simplify each expression.

a. $3 + (-4x) + (-21)$

b. $-y + 1 + (-72y)$

c. $3(4 + 12x) - (-25x)$

d. $4t + (-9) - (-3t) + (-85)$

e. $\frac{-7}{6}w + \frac{8}{3}w$

f. $3.9w - 17.32w + (-8)$